A COMPARATIVE STUDY REGARDING THE PERFORMANCE AND THE EFFICIENCY OF THE PUBLIC SECTOR IN THE MEMBER STATES OF THE EUROPEAN UNION

Marius MILOŞ *

Abstract

In modern economies, the public authority entrusted to manage the public affairs of the community is the state. In fulfilling their objectives the public decision makers assume a number of tasks according to the doctrines embraced by the government. The government results as an outcome of the election process and thus, faithful to its own doctrine, is more or less invasive in the economy providing more or less protection and public goods consequently increasing or decreasing its spending according to its needs. The final outcome pursued by the state is the welfare of its citizens. Eventually, the way this goal is achieved, as well as the perception the society has regarding the way the state acts is highly correlated to the performance and efficiency of the public sector.

Therefore measuring performance and efficiency represent very important tasks in spending public money. The results of these indicators reveal possible changes in managing the public sector.

Key words: public sector, governance, public spending, performance

JEL classification: H

1. Introduction

Measuring the performance and the efficiency of the public sector could be achieved by using the methodology proposed by Afonso, Schuknecht and Tanzi [Afonso, Schuknecht and Tanzi, 2005]. Our analysis shows that the new member states of the European Union have obtained low performance scores and also pretty bad scores regarding efficiency. In opposition to those results, the old member states show a different sort of behavior. There are very good examples like Germany and Finland, which prove both performance and efficiency. Anyway, some other states like France or Holland which have large public expenditures are effective, but lose in efficiency.

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2. Performance of the public sector

In comparison to the previous studies, we have used a slight different way of calculating performance indicators. This is because the availability of data, but also because we have targeted just member states of the European Union and not countries belonging to the OECD. Our results show the performance and the efficiency of the public sector from the latest years (2006-2007). By calculating the performance indicators, we have used some indicators of two types. Those were opportunity indicators like the administrative sector, education, health, and also Musgravian indicators like stability, economic performance. Each of these indicators has itself been built by using several rankings, appropriate to the measured indicator by using subindicators. The sub indicators have been all computed according to an average which was given the value 1 and consequently, we have added the values of all subindicators to obtain a final performance indicator. The figure underneath reveals the way in which the performance of public sector has been obtained.

Source: Own elaboration

Fig. 1 – Performance indicators
In the analysis we have made each sub indicator had the same importance by judging the final performance of the public sector. Referring mainly to the performance, the most effective public sectors could be found in Finland, Denmark and France, while at the end of our ranking there are countries like Bulgaria and Romania. It is worth mentioning the level obtained by the countries analysed regarding some specific sectors. So, for example, it is interesting to compare performances within the educational system. The methodology used considered two sub indicators: the gross enrolment in the secondary level and the capacity of students to read and solve mathematics problems. Attached to this work, you could see exactly the scores obtained for the analysed countries (table 1), on a whole it is worth mentioning that Finland is in the top with a score of 1.11, while Romania is at the end, with 0.83.

At the same time, calculating performance in the health sector was possible by focusing on life expectancy and infantile mortality. There are countries like France, Finland, Germany (1.54; 1.49; 1.36) and on the other side countries like Lithuania, Bulgaria and Romania (0.84; 0.65; 0.60). In the following table, it is possible also to compare performance regarding administration, public infrastructure and economical stability.

Table nr. 1- The performance of the public sector

<table>
<thead>
<tr>
<th>Country</th>
<th>Index of Performance</th>
<th>Rank</th>
<th>Administration</th>
<th>Education</th>
<th>Health</th>
<th>Infrastructure</th>
<th>Stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1.11</td>
<td>7</td>
<td>1</td>
<td>1.05</td>
<td>1.27</td>
<td>1.19</td>
<td>1.08</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.82</td>
<td>19</td>
<td>0.8</td>
<td>0.9</td>
<td>0.65</td>
<td>0.69</td>
<td>1.08</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1.05</td>
<td>11</td>
<td>0.88</td>
<td>0.99</td>
<td>1.39</td>
<td>0.91</td>
<td>1.09</td>
</tr>
<tr>
<td>Denmark</td>
<td>1.22</td>
<td>2</td>
<td>1.21</td>
<td>1.09</td>
<td>1.28</td>
<td>1.27</td>
<td>1.25</td>
</tr>
<tr>
<td>Estonia</td>
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<td>12</td>
<td>1.05</td>
<td>1.02</td>
<td>0.92</td>
<td>0.94</td>
<td>1.24</td>
</tr>
<tr>
<td>Finland</td>
<td>1.24</td>
<td>1</td>
<td>1.18</td>
<td>1.11</td>
<td>1.49</td>
<td>1.2</td>
<td>1.25</td>
</tr>
<tr>
<td>France</td>
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<td>3</td>
<td>1.09</td>
<td>1.04</td>
<td>1.54</td>
<td>1.27</td>
<td>1.04</td>
</tr>
<tr>
<td>Germany</td>
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<td>1.15</td>
<td>1.01</td>
<td>1.36</td>
<td>1.32</td>
<td>1.03</td>
</tr>
<tr>
<td>Greece</td>
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<td>13</td>
<td>0.91</td>
<td>0.96</td>
<td>1.16</td>
<td>0.95</td>
<td>0.92</td>
</tr>
<tr>
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<td>17</td>
<td>0.98</td>
<td>0.98</td>
<td>0.89</td>
<td>0.82</td>
<td>0.93</td>
</tr>
<tr>
<td>Latvia</td>
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<td>16</td>
<td>0.89</td>
<td>0.96</td>
<td>1.12</td>
<td>0.81</td>
<td>0.96</td>
</tr>
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<td>15</td>
<td>0.87</td>
<td>0.98</td>
<td>0.84</td>
<td>0.88</td>
<td>1.18</td>
</tr>
<tr>
<td>Luxembourg</td>
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<td>14</td>
<td>0.9</td>
<td>0.98</td>
<td>1</td>
<td>0.84</td>
<td>1.16</td>
</tr>
<tr>
<td>Netherlands</td>
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<td>5</td>
<td>1.11</td>
<td>1.09</td>
<td>1.22</td>
<td>1.23</td>
<td>1.11</td>
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<tr>
<td>Poland</td>
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<td>0.97</td>
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<td>0.96</td>
<td>1.21</td>
<td>1</td>
<td>1.04</td>
</tr>
<tr>
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<td>20</td>
<td>0.73</td>
<td>0.83</td>
<td>0.6</td>
<td>0.62</td>
<td>0.97</td>
</tr>
<tr>
<td>Slovenia</td>
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<td>0.98</td>
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<td>0.91</td>
<td>1.13</td>
</tr>
<tr>
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<td>1.03</td>
<td>1.32</td>
<td>1.06</td>
<td>1.15</td>
</tr>
<tr>
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<td>6</td>
<td>1.14</td>
<td>1.02</td>
<td>1.2</td>
<td>1.16</td>
<td>1.15</td>
</tr>
</tbody>
</table>

Source: Calculation of author
For a better understanding of the performance from the different sectors, we have presented the performance achieved by the best member states from the European Union and also the performance achieved by the less successful public sectors. It is obvious in the following figures that France and Finland prove very good scores regarding health in comparison with Romania and Bulgaria, one reason for this is the life expectancy, which is 8.9 years higher in the first mentioned group of countries.

The same result occurs regarding education, where abilities in Maths and reading are of 1.13 in Finland and only 0.84 in Romania. You will discover the same difference also by analyzing the infrastructure performance indicators.

Fig. 2. Most performant three public sectors in considered countries in 2006

Fig. 3. Less performant three public sectors in considered countries in 2006
3. Efficiency of the public sector

The performance of the public sector should always be discussed also according to the efficiency of the public sector. The efficiency of the public sector is also obtained through calculating the efficiency of each single sector and afterwards by getting a composed efficiency indicator. The efficiency of one sector according to the methodology used is obtained by dividing the previous performance to the percentage of GDP from each single country used to obtain that performance.

\[
PSE = \frac{PSP}{\% EXP/GDP} \quad (1)
\]

\[
PSE_{sector} = \frac{PSP_{sector}}{\% EXP_{sector}/GDP} \quad (2)
\]

PSE- public sector efficiency  
PSP- public sector performance  
EXP- % expenditure of GDP on a special sector

Table nr. 2 - Efficiency of the public sector at the level of the member states of the European Union (2006-2007)

<table>
<thead>
<tr>
<th>Country</th>
<th>Index of efficiency</th>
<th>Rank</th>
<th>Administration</th>
<th>Education</th>
<th>Health</th>
<th>Infrastructure</th>
<th>Stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1.15</td>
<td>11</td>
<td>0.82</td>
<td>0.94</td>
<td>1.11</td>
<td>1.92</td>
<td>0.98</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.95</td>
<td>17</td>
<td>n/a</td>
<td>1.14</td>
<td>0.65</td>
<td>0.75</td>
<td>1.29</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1.04</td>
<td>15</td>
<td>n/a</td>
<td>1.20</td>
<td>1.29</td>
<td>0.58</td>
<td>1.11</td>
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<tr>
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<td>0.69</td>
<td>1.30</td>
<td>2.49</td>
<td>1.07</td>
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<tr>
<td>Estonia</td>
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<td>1.07</td>
<td>1.30</td>
<td>0.93</td>
<td>1.66</td>
</tr>
<tr>
<td>Finland</td>
<td>1.33</td>
<td>3</td>
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<td>0.91</td>
<td>1.40</td>
<td>1.99</td>
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<tr>
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<td>2.20</td>
<td>1.00</td>
</tr>
<tr>
<td>Greece</td>
<td>0.9</td>
<td>19</td>
<td>0.79</td>
<td>1.22</td>
<td>1.07</td>
<td>0.94</td>
<td>0.96</td>
</tr>
<tr>
<td>Italy</td>
<td>0.86</td>
<td>18</td>
<td>0.73</td>
<td>1.12</td>
<td>1.07</td>
<td>0.58</td>
<td>0.84</td>
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<tr>
<td>Latvia</td>
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<td>9</td>
<td>n/a</td>
<td>1.04</td>
<td>1.74</td>
<td>0.53</td>
<td>1.40</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1.23</td>
<td>6</td>
<td>n/a</td>
<td>1.01</td>
<td>1.63</td>
<td>0.79</td>
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<tr>
<td>Luxembourg</td>
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<td>n/a</td>
<td>n/a</td>
<td>1.4</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>Netherlands</td>
<td>1.15</td>
<td>10</td>
<td>1.02</td>
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<td>1.62</td>
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<tr>
<td>Poland</td>
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<td>1.0</td>
<td>1.59</td>
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<td>Portugal</td>
<td>1.07</td>
<td>13</td>
<td>1.10</td>
<td>0.96</td>
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<td>1.27</td>
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<td>Romania</td>
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<td>0.74</td>
<td>0.8</td>
<td>0.44</td>
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<tr>
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<td>0.90</td>
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<td>0.9</td>
<td>1.10</td>
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<tr>
<td>Spain</td>
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<td>5</td>
<td>1.34</td>
<td>1.29</td>
<td>1.36</td>
<td>0.9</td>
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</tr>
<tr>
<td>U.K.</td>
<td>1.18</td>
<td>8</td>
<td>1</td>
<td>1.01</td>
<td>0.95</td>
<td>1.80</td>
<td>1.15</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.81</td>
<td>20</td>
<td>n/a</td>
<td>0.97</td>
<td>0.92</td>
<td>0.57</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Mostly the efficiency of the public sector should be the indicator considered when building a budget. The size of the government should be correlated to efficiency and only afterwards public expenditures could be optimized. By comparing efficiency indicators to performance indicators it is remarkable that France, Denmark and Netherlands have lost lots
of places in the efficiency ranking (France from 3 to 14). On the other hand, the Baltic countries with a smaller size of the government have grown regarding efficiency, being ranked 8.9 places above. All these are due to the size of the public expenditure. The efficiency ranking can be followed with the next figure:

![Efficiency Ranking Diagram](image)

*Source: Calculation of author*

**Fig. 4- Comparison of the efficiency of the public sector in E.U. (2006)**

4. Conclusions

Under actual requirements, the construction of the expenditure part of the state budget is highly ineffective, a great volume of funds being absorbed by either the black holes in the economy or by non-productive destinations, especially in the new member states of the European Union, especially Romania and Bulgaria. For the analyses purpose, it is worth using the benchmarking presented in our analysis and to see how much could be achieved by using less money or with the budgeted money to reach better results. Therefore, given the
limited funds the budget can make use of it is imperative that the budget be built on effective programs that may add value to the economy and sustain growth.

It is proved that certain states have the ability to reach both performance and efficiency. Such models, based on our analysis are Finland and Germany. Beside these countries with a large public sector, there are also countries which have significant public expenditures but this determines lower efficiency scores (France, Netherlands). Some Eastern countries, but especially the Baltic countries, which prove lower public sectors obtain because of this policy better efficiency scores.

A concluding remark states the fact that due to this analysis, countries could take advantage of the examples offered by the efficient public sectors and improve policy regarding public expenditure.

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